Abstract

Objective Describing the association between the nutritional and oral health status of children attending a school in Cartagena, Colombia. Method This was a descriptive, cross-sectional study. The sample consisted of 180 children between aged 5 to 12. Malnutrition was assessed by anthropometric and biochemical tests, a questionnaire was used for ascertaining their diets and gingival disease, changes in soft tissues, dental caries, enamel abnormalities and oral hygiene status were measured clinically. Descriptive statistics involved frequency distributions. Disease prevalence was estimated for inferring the results; odds ratios (OR) were used for assessing the strength of association between variables (95 % confidence interval) and the X² test was used determining statistical significance. Results 2 % (0.0-4.4 95 % CI) chronic malnutrition was found. The most prevalent oral diseases were dental caries (82 %; 77-88 95 % CI), periodontal disease (66 %; 59-73 95 % CI), fluorosis (30 %; 23-37 95 % CI), hypocalcification (11 %; 6-15 95 % CI), and hypoplasia (6 %; 3-10 95 % CI). Malnutrition and hypoplasia and the risk of malnutrition and fluorosis had the highest estimates of association (OR=18.5; 2.33-147.2 95 % CI; p=0.000 and OR=2.63; 1.02-6.76 95 % CI; p=0.04, respectively). Conclusions A direct association between malnutrition and oral pathologies could not be determined; alteration such as fluorosis and hypoplasia could be influenced by malnutrition.

Keywords
Protein-energy malnutrition, dental fluorosis, dental caries, dental enamel hypoplasia.